ProductInformation

ANTI-p62^{dok}
Developed in Rabbit, Affinity Isolated Antibody

Product Number **P 3735**

Product Description

Anti-p62^{dok} is developed in rabbit using a peptide corresponding to amino acids 425 to 439 of human p62^{dok} as immunogen.[1]

Anti-p62^{dok} recognizes p62^{dok} by immunoblotting using human Jurket or THP-1 cell lysates.

p62^{dok} (downstream of tyrosine kinase) is a member of a class of docking proteins that contain multiple tyrosine residues and putative SH2 binding sites.[2, 3] The Dok family members include: Dok-1 (p62^{dok}), Dok-2 (p56^{dok}), Dok-3, -4, -5, and -6. p62^{dok} has been purified from a hematopoietic cell line expressing p210 (Bcr-Abl), a fusion protein caused by the t(9;22) translocation and associated with chronic myelogenous leukemia.[1] p62^{dok} has features of a signaling molecule and is a major substrate for many tyrosine kinases including c-kit, v-abl, v-Fps, v-Src, v-Fms.[1, 2] It is also the substrate phosphorylated in response to stimulation by certain growth factors, including EGF, PDGF, IGF, VEGF and insulin receptors.[4, 5] Upon phosphorylation, p62^{dok} forms a complex with the ras GTPase-activating protein (RasGAP).[1, 2, 6] DOK mRNAs (p62^{dok} and p56^{dok-2}) are primarily expressed in cells and tissues of hematopoietic origin, as well as lung.[7]

Reagent

Anti-p62^{dok} is supplied as 0.5 mg/ml of affinity isolated antibody in phosphate buffered saline (PBS), containing 0.02 % sodium azide.

Storage/Stability

For continuous use, store at 2 °C to 8 °C for up to one month. For extended storage, freeze in working aliquots at −20 °C. Avoid repeated freezing and thawing. Do not store in a frost-free freezer. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

Product Profile

For immunoblotting, a working concentration of 0.25 to 0.5 µg/ml (1:2000 to 1:1000 dilution) antibody is recommended using whole cell lysates of human Jurkat cells or THP-1 cells. A band of approximately 62 kDa is detected.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentrations by titration test.

References

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3. Mayer, B.J., et al., Evidence that SH2 domains promote processive phosphorylation by protein-tyrosine kinases. Curr. Biol. **5**, 296-305 (1995).
4. Guo, D., et al., Vascular endothelial cell growth factor promotes tyrosine phosphorylation of mediators of signal transduction that contain SH2 domains. Association with endothelial cell proliferation. J. Biol. Chem. **270**, 6729-6733 (1995).
5. Holgado, M.M., et al., A Grb2-associated docking protein in EGF- and insulin-receptor signaling. Nature, **379**, 560-564 (1996).
6. Holland, S.J., et al., Juxtamembrane tyrosine residues couple the Eph family receptor EphB2/Nuk to specific SH2 domain proteins in neuronal cells. EMBO J., **16**, 3877-3888 (1997).
7. Di Cristofano, A., et al., Molecular cloning and characterization of p56dok-2 defines a new family of RasGAP-binding proteins. J. Biol. Chem., **273**, 4827-4830 (1998).

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